BAILEYS FERTILISERS
AKC Pty Ltd trading as
A.B.N: 30 008 747 911

SAFETY DATA SHEET

PRODUCT NAME: **ZEOLITE**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Other Name(s): None.
Recommended use: Soil amendment.
Supplier: Baileys Fertilisers.
Address: 24 Beach St
Kwinana Beach
Western Australia 6167
Telephone: (08) 9439 1688 (Monday to Friday: 8.00am – 5.00pm)
Emergency Contact: Poisons Information Centre on 13 11 26
Facsimile: (08) 9439 1068
Email: baileys@baileysfertiliser.com.au
Website: baileysfertiliser.com.au

2. HAZARD IDENTIFICATION

1. GHS Classification: Hazardous according to Australian Criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS).

2. Signal Word: **Warning**

3. Hazard Category: Skin Irritation Category 2

4. Hazard Symbol:

5. Hazard Statement: H315 Causes skin irritation.
H320 Causes eye irritation.

6. Other Classifications: Zeolite contains crystalline silica. The following classification **ONLY** applies to this substance if it is in the form of a fine respirable due in an occupational (chronic exposure) setting:
H350 May cause cancer.
H373 May cause damage to organs.

7. Precautionary Statements:

Prevention: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P264 Wash exposed areas of the body thoroughly after handling.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.

Response: P308 + P313 IF exposed or concerned: Get medical advice / attention.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P312 Call a Poison Centre or doctor / physician if you feel unwell.

P321 Specific treatment – see first aid instructions.

P332 + P313 If skin irritation occurs: Get medical advice / attention.

P362 Take off contaminated clothing and wash before reuse.

Storage: P405 Store locked up.

Disposal: P501 Dispose of contents/container in accordance with local or national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Contents % $^{w}/_{w}$
Zeolite	1318-02-1	100
Silica component may include: Cristobalite Quartz (crystalline silica)	 14464-46-1 14808-60-7	 < 10 < 10

4. FIRST AID MEASURES

If medical advice is needed, contact the Poisons Information Centre on 13 11 26.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists, get medical advice.

Skin Contact: Wash with plenty of soap and water. If skin irritation occurs, get medical advice / attention. Take off contaminated clothing and wash before re-use.

Inhalation: If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Ingestion: Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor.

Medical Attention and Special Treatment: Treat symptomatically.

Recommended Facilities: Ready access to running water is required. Accessible eyewash is required.

5. FIRE FIGHTING MEASURES

Flammability: Non–flammable product.

Extinguishing Media: Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.

Fire/Explosion Hazard: Product does not burn. Dust may form an irritating atmosphere. No special measures required.

Hazchem Code: N/A

6. ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Wear suitable protective clothing and personal protection, including a dust mask or respirator if dust is likely to be created. Clear the area of any unprotected personnel. Carefully sweep up and shovel into suitable containers for reuse/recycle or disposal.

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7. HANDLING AND STORAGE

Handling: Stable under normal use and storage conditions.

Use as instructed, ensuring safe work practices are followed that avoid eye or skin contact or inhalation. Ensure the product remains moist to avoid the generation of dust.

Storage: Store in a cool, dry well-ventilated area.

Other information: None applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standard: 10 mg/m^3 nuisance dust.

Engineering Controls: Ensure adequate natural ventilation, and manage dust levels.

Personal Protection: Wear gloves, safety boots, protective clothing and safety glasses with side shields. When dust is likely to be generated, use a respirator of class P1 or P2 for dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Solid, granular, off-white to tan colour.

Odour: No odour.

Odour Threshold: Not applicable.

pH: Approx. 8.5 – 9.0 (10% aqueous suspension)

Melting / Freezing Point: Not applicable.

Boiling Point: Not applicable.

Melting Point: Not available.

Flash Point: Non–flammable.

Evaporation Rate: Not applicable.

Flammability limits: Non–flammable.

Vapour pressure: Negligible at ambient temperatures.

Solubility in water: Not soluble in water.

Density: Approx. 650 kg/m^3.

10. STABILITY AND REACTIVITY

Reactivity / Chemical Stability: Material is stable under normal storage and handling conditions.

Conditions to avoid: Containers should be kept closed to avoid contamination. Avoid the creation of dust.

Incompatible materials: Avoid contact with strong oxidising agents and hydrogen fluoride.

Decomposition products: None known.

Hazardous reactions: Zeolites will react with hydrogen fluoride (HF) acid. Avoid contact with strong oxidising agents.

11. TOXICOLOGICAL INFORMATION

No adverse health effects are expected if the product is handled in accordance with this SDS and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects anticipated under normal use conditions.

Eye contact: Fine dust may cause irritation when in direct contact.

Skin contact: Material may cause drying out of skin.

Inhalation: May cause respiratory irritation. Also see chronic effects.
The respirable fraction of the dust of this product is considered to be a target organ toxicant because of the presence of crystalline silica at greater than 1%. This is due to the development of silicosis, which can occur following exposures to extremely high levels of fine silica dust. Silicosis is a type of pneumoconiosis – a disease of the lung that causes inflammation, scar tissue, lesions and fibrosis in the lung (alveolar). Symptoms can include shortness of breath, cough, fever, loss of appetite and cyanosis (bluish skin). Silicosis can occur following prolonged exposure (e.g. 10 years) to relatively high levels of fine crystalline silica dust. Based on limited animal research, it is possible that repeated inhalation of dust may lead to inflammation and scarring of the lung.

Long Term Effects: The adverse health effects from respirable crystalline silica exposure – silicosis, cancer, scleroderma, tuberculosis and nephrotoxicity – are chronic effects. This product is granular, but may become a respirable dust through sanding / grinding.

Zeolites have been classified by IARC as group 3 – cannot be evaluated as to their carcinogenicity to humans. However, there is evidence that this material does contain quartz and cristobalite. Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (IARC Group 1). The carcinogenicity of silica is related to long term (e.g. 10 years) inhalation of very fine particulate (e.g. from sand blasting or dry cutting of quartz containing substrates). Carcinogenicity of silica appears linked to the development of silicosis, followed by complications, and eventually lung cancer.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Not ecotoxic in the aquatic environment.

Persistence and degradability: This product is a soil amendment and will react in the soil as such.

Mobility: No data.

13. DISPOSAL CONSIDERATIONS

Disposal: Dispose of in accordance with local regulations, to an approved landfill site.

14. TRANSPORT INFORMATION

UN Number:	N/A	**UN Proper Shipping Name:**	N/A	**Class and Subsidiary Risk(s):**	N/A
Packing Group:	N/A	**Special precautions for user:**	None	**Hazchem code:**	N/A

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15. REGULATORY INFORMATION

AICS All chemicals listed on the Australian Inventory of Chemical Substances (ACIS).

16. OTHER INFORMATION

Additional Information

EXPOSURE STANDARD – TIME WEIGHTED AVERAGE: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increases the exposure period and shorten the period of recuperation).

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES: The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE: It should be noted that the effects from exposure to this product will depend on several factors including; form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number – used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No – European Community Number
EMS	Emergency Schedules (Emergency Procedure for Ships Carrying Dangerous Goods)
GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m^3	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (highly acidic) to 14 (highly alkaline)
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

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Disclaimer

This document has been prepared by Baileys Fertilisers and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue.

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End of SDS